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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,410	04/17/2007	Shigeki Uchira	1032879-000075	8787

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BUCHANAN, INGERSOLL & ROONEY PC		
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ALEXANDRIA, VA 22313-1404		

EXAMINER	
YANG, JAY	

ART UNIT	PAPER NUMBER
1786	

NOTIFICATION DATE	DELIVERY MODE
11/02/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
offserv@bipc.com

Office Action Summary	Application No. 10/593,410	Applicant(s) UEHIRA ET AL.	
	Examiner J. L. YANG	Art Unit 1786	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 10 and 13 is/are rejected.
- 7) ☐ Claim(s) 2-5 and 7-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/24/09; 09/19/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeichi et al. (US 5,779,935 A).

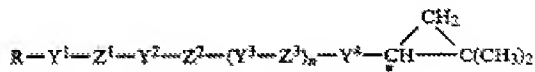
Takeichi et al. discloses anisotropic dielectric material that is used for a liquid crystal mixture (col. 1, lines 15-19) that can be used in the construction of LCD devices (col. 1, line 13):



(col. 8) that comprises aromatic groups (phenyl) and a cyclopropylcarbonyl group.

3. Claims 1, 6, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Tabohashi et al. (US 4,880,561 A).

Tabohashi et al. discloses anisotropic optically active liquid crystalline composition that can be used in LCD devices (col. 1, lines 24-30) represented by the following general formula:



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(abstract) where $Y^4 = -OCO-$ (col. 3, line 34) and $Z^{1-3} =$ phenyl groups (col. 3, lines 36-40) that can comprise a composition with a nematic phase (col. 10, line 18).

Claim Rejections – 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeichi et al. (US 5,779,935 A) in view of Morishima et al. (US 2003/0223026 A1).

Takeichi et al. discloses the anisotropic material according to Claim 1 as shown above in the 35 U.S.C. 102(b) rejection. However, Takeichi et al. does not explicitly disclose a film formed from it.

Morishima et al. discloses an optical compensatory sheet comprising a transparent support and an optically anisotropic layer comprising discotic liquid crystal molecules (abstract) for use in the construction of a LCD device ([0002]). It would have

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been obvious to one of ordinary skill in the art to likewise incorporate the anisotropic material as disclosed by Takeichi et al. to such a layer. The motivation is clearly provided by the fact that the invention as disclosed by Takeichi et al. too is directed to the construction of a liquid crystal device (col. 1, lines 9-10), rendering such an analogous use in an identical field as disclosed by Morishima et al. predictable with a reasonable expectation of success.

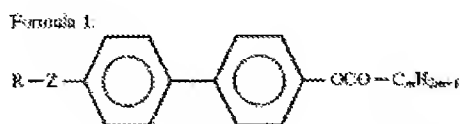
4. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabohashi et al. (US 4,880,561 A) in view of Morishima et al. (US 2003/0223026 A1).

Tabohashi et al. discloses the anisotropic material according to Claim 1 as shown above in the 35 U.S.C. 102(b) rejection. However, Tabohashi et al. does not explicitly disclose a film formed from it.

Morishima et al. discloses an optical compensatory sheet comprising a transparent support and an optically anisotropic layer comprising discotic liquid crystal molecules (abstract) for use in the construction of a LCD device ([0002]). It would have been obvious to one of ordinary skill in the art to likewise incorporate the anisotropic material as disclosed by Tabohashi et al. to such a layer. The motivation is clearly provided by the fact that the invention as disclosed by Tabohashi et al. too is directed to the construction of a liquid crystal device (col. 1, lines 5-35), rendering such an analogous use in an identical field as disclosed by Morishima et al. predictable with a reasonable expectation of success.

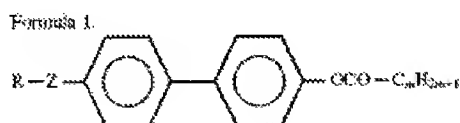
Allowable Subject Matter

1. Claims 2-5 and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art is disclosed by Takeichi et al. (US 5,779,935 A):



(abstract) where C_mH_{2m+1} = cyclopropyl group (col. 8). However, Takeichi et al. does not give sufficient motivation to produce a compound in which the aromatic group is substituted by 3 or more cyclopropyl group.

2. Claims 15-18 are allowable over prior art. The closest prior art is disclosed by Takeichi et al. (US 5,779,935 A):



(abstract) where C_mH_{2m+1} = cyclopropyl group (col. 8). However, Takeichi et al. does not give sufficient motivation to produce a compound in which the aromatic group is substituted by 3 or more cyclopropyl group.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. L. YANG whose telephone number is (571)270-1137.

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The examiner can normally be reached on Monday to Thursday from 8:30 am to 6:00 pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571)272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1786

/J. Y./
Examiner, Art Unit 1786